

Residential Prosumers in the European Energy Union

EAHC/2013/CP/04

Mapping the legal and regulatory framework in the 28 Member States, Iceland and Norway

Iceland



This study is part of the mapping of the legal and regulatory framework for residential prosumers in the 28 Member States, Iceland and Norway, within the project on Residential Prosumers in the European Energy Union EAHC/2013/CP/04, and carried out by Milieu Ltd (Belgium), Chaussée de Charleroi, 112, B-1060 Brussels, tel: +32 (0)2 506 1000; web address: www.milieu.be

This study presents the legal and regulatory framework for residential prosumers in Iceland and has been prepared by Ottar Freyr Gislason as the author and reviewed by the managers of the project Marta Ballesteros (Marta.Ballesteros@milieu.be) and Marta Santos Silva (Marta.Santos.Silva@milieu.be). The study has been completed in February 2017.

Disclaimer: The information and views set out in this study are those of the authors and do not necessarily represent the official views of the Commission.

National report on the regulatory framework for residential prosumers: Iceland

General Description of the national legal and regulatory framework

General

Legislation applying to the energy market in Iceland covers, *inter alia*, natural resources, the distribution of heat and electricity generation. Below is a list of relevant legal acts:

- Electricity Act No. 65/2003 of 26 March 2003, as amended¹;
- Regulation 1040/2005 on the implementation of the Electricity Act of 25 November 2005, as amended²;
- Act on the National Energy Authority No. 87/2003 of 16 June 1998³;
- Act on the survey and utilization of ground resources No. 57/1998 of 10 June 1998⁴;
- Act on the guarantee of origin of electricity produced from renewable energy sources, etc. No. 30/2008 of 16 April 2008⁵;
- Act on environmental impact assessment No. 106/2000 of 25 May 2000⁶;
- Regulation 660/2015 on environmental impact assessment as amended by regulation 713/2015 of 3 July 2015⁷;
- Act on the establishment of Landsnet hf. No. 75/2004 of 7 June 2004⁸;
- Planning Act No. 123/2010 of 22 September 2010⁹;
- Regulation on planning No. 90/213 as amended of 24 June 2013¹⁰;
- Regulation on construction permits No. 772/2012 of 4 September 2012¹¹;
- Act on water No. 15/1923 of 20 Jun 1923, as amended¹²;
- Act on the Appeals board on environment and resources No. 130/2011 of 28 September 2011¹³.

1. What types of residential prosumers are there in your country on the basis of type of RES used and size of the installation?

Answer:

As described below in section 3.3., residential prosumers are not specifically defined in the Electricity Act No. 65/2003; thus there are no different types of residential prosumers defined either. In general, prosumers would fall within the definition of small-scale electric power plants. There are currently no prosumers, i.e. residential prosumers, selling energy generated by wind turbines, solar photovoltaic (PV) systems, etc. back to the grid. There are on the other hand several small-scale electric power plants providing electricity to the grid. The RES technology used for small-scale electric power plants in Iceland is hydro.

¹ Available at www.althingi.is/lagas/nuna/2003065.html.

² Available at www.reglugerd.is/reglugerdir/allar/nr/1040-2005.

³ Available at www.althingi.is/lagas/nuna/2003087.html.

⁴ Available at www.althingi.is/lagas/nuna/1998057.html.

⁵ Available at www.althingi.is/lagas/nuna/2008030.html.

⁶ Available at www.althingi.is/lagas/nuna/2000106.html.

⁷ Available at www.reglugerd.is/reglugerdir/allar/nr/660-2015.

⁸ Available at www.althingi.is/lagas/nuna/2004075.html.

⁹ Available at www.althingi.is/lagas/nuna/2010123.html.

¹⁰ Available at www.reglugerd.is/reglugerdir/eftir-raduneytum/umhverfis--og-audlindaraduneyti/nr/18558.

¹¹ Available at www.reglugerd.is/reglugerdir/allar/nr/772-2012.

¹² Available at www.althingi.is/lagas/146a/1923015.html.

¹³ Available at www.althingi.is/lagas/nuna/2011130.html.

2. What is the institutional framework & division of competences regarding residential prosumers in your country?

Answer:

The National Energy Authority (*Orkustofnun*)¹⁴ is the competent authority charged with energy related matters, including small-scale electric power plants.

The National Energy Authority also comprises the institutional framework & division of competences regarding residential prosumers in Iceland. It is a government agency under the auspices of the Ministry for Industries and Innovation. Its main responsibilities are to advise the Government on energy issues and related topics, to license and monitor the development and exploitation of energy and mineral resources, to regulate the operation of the electrical transmission and distribution system and to promote energy research.

Specific Questions on the regulatory framework for residential prosumers

3. What is the regulatory framework for residential prosumers in your country?

General

There is no specific regulatory framework for residential prosumers. The main legislative act governing access to the grid, etc. and only act comprising the regulator is the Electricity Act which implements Directive 96/92/EC and Directive 2003/54/EC, which have been incorporated into the EEA-Agreement.

3.1. What is the existing legislative framework regulating Renewable Energy Projects in your country?

Answer:

The Electricity Act No. 65/2003, implementing Directive 96/92/EC and Directive 2003/54/EC, governs renewable energy projects in Iceland.

3.2. Does the Renewables National Action Plan include any objectives for residential prosumers (if so, please specify)

Answer:

Iceland has not yet adopted a Renewables National Action Plan. There is no mention of residential prosumers in the report “A comprehensive energy strategy for Iceland”¹⁵.

3.3. Is there a definition (legal or regulatory) of residential prosumers (or self-consumption) in your country? If so, state it and describe the elements of this definition?

Answer:

Residential prosumer are not specifically defined in the Electricity Act No. 65/2003 but would

¹⁴ Orkustofnun, website: www.nea.is.

¹⁵ Report presented at the 140th session of the Icelandic Parliament (2011-2012). Available at www.althingi.is/altext/140/s/pdf/0286.pdf

currently fall within the definition of small-scale electric power plants. For small-scale electric power plants the following applies: A power development licence is not required for an electric power plant with a rated capacity of under 1 MW, unless the energy produced is sold or transmitted into an electricity supply system. A power development licence is not required for an electric power plant with rated capacity below 100 KW. The term self-consumption is not defined by law but in the *Handbook on small-scale electric power plants* published by the Ministry of Industries and Innovation, the term “micro power plant” (rated capacity below 100 KW) includes “domestic power plants for self-consumption, generally with capacity below 30 KW”.

4. What are the permitting requirements for each type of residential prosumer?

General

Residential prosumer not specifically defined in the Electricity Act No. 65/2003 but would fall within the definition of small-scale electric power plants. Thus there is no definition of different types of residential prosumers. For small-scale electric power plants the following applies: A power development licence is not required for an electric power plant with a rated capacity of under 1 MW, unless the energy produced is sold or transmitted into an electricity supply system. The owners of power plants with a rated capacity of 30-1000 kW shall submit technical details of the plants to the National Energy Authority (*Orkustofnun*). Furthermore, *Orkustofnun* shall be informed annually of the total generation of power plants with a rated capacity over 100 kW. The RES technology used for small-scale electric power plants in Iceland is hydro. There are currently no prosumers, i.e. residential prosumers, selling energy generated by wind turbines, solar photovoltaic (PV) systems, etc. back to the grid.

The Minister of Industries and Innovation issues power development licences at the costs of 100.000 ISK plus 10.000 ISK for each MW. The application shall be published in the Official Legal Gazette, after which interested parties have four weeks to raise complaints. The National Energy Authority shall provide the Ministry with an opinion on the application and the Ministry shall decide on whether to grant the licence within two months. A list of the thirteen small-scale electric power plants currently in possession of a power development licence, can be found on the website of the Ministry of Industries and Innovation.¹⁶

4.1. Does your country recognize certain forms of self-consumption and subject prosumers to certain

- requirements,
- application fees and
- one-off costs

in order to give them a **permit or licence to generate energy?**

Answer:

Self-consumption is recognised for small-scale electric power plants. If the energy produced is only for self-consumption, a power development licence is not required for an electric power plant with a rated capacity below 1 MW. The tariff for a power development licence is 100.000 ISK plus 10.000 ISK for each MW. Before an electric power plant with a rated capacity above 200 KW is constructed, an opinion from the National Planning Agency is needed on whether an environmental impact assessment is required. This may also apply to smaller plants if they are to be constructed in protected areas. A construction and building permit is needed from the local authority for plants with a rated capacity above 200 KW, this may also apply for smaller plants in protected areas. Permits from the Directorate of Fisheries or the Cultural Heritage Agency may be

¹⁶ Ministry of Industries and Innovation: A list of small-scale power plants, available at www.atvinnuvegaraduneyti.is/verkefni/leyfisveitingar/nytingar-og-rannsoknaleyfi/nr/6674.

required where the planned power plants may impact fish stocks or archaeological heritage. The distribution system operator shall establish a tariff for his services pursuant to an income possibility curve decided by the National Energy Authority. The income possibility curve is based on how economically efficient the power plant is, including: i) how effective and stable is the electricity provided to the grid. For example, is the power plant only providing electricity to the grid at certain hours, months, seasons, or does it provide a constant stream of electricity at all times, ii) does the power plant provide electricity to the grid during peak hours.

- 4.2. Does the national legal/regulatory framework determine the contractual conditions under which prosumers are allowed to feed or sell their surplus back into the grid or to other consumers?

Answer:

Residential prosumer are not specifically defined in the Electricity Act No. 65/2003 but would fall within the definition of small-scale electric power plants. Article 16 of the Electricity Act defines the role and responsibility of companies responsible for the distribution of electricity. Article 16, para 3.1 states that all producers of electricity shall be allowed access to the grid as long as they fulfil all technical requirements for accessing the grid and have paid all relevant fees. New producers can be refused access to the grid, with referral to the carrying capacity of the grid, for safety reasons, or to ensure the quality of the distribution system. The refusal shall be provided in writing and include arguments for the refusal. Small-scale electric power producers are only allowed to provide electricity to the grid; they may not connect to other consumers directly.

5. What are the rules applicable to the access to the grid?

General

When it comes to small-scale electric power plants the general rule is that the generators are connected “in front of the meter”. Small-scale electric power plants are only allowed to provide electricity to the grid and may not connect with other electricity users directly. The distribution system operator shall, *inter alia*: Connect customers to the distribution system on request, provided that they fulfil the technical conditions required and provided also that they pay a distribution tariff according to the provisions of a tariff pursuant to Article 12 of the Electricity Act. The distribution system operator shall establish a tariff for his services pursuant to an income possibility curve decided by the National Energy Authority.

- 5.1. What is the inter-connection configuration used for each type of residential prosumer?

Answer:

When it comes to small-scale electric power plants the general rule is that the generators are connected “in front of the meter”, so bypassing the onsite load entirely and feeding 100% of the power into the grid.

- 5.2. Does the competence to determine the inter-connection configuration lie at State level or at a regional/lander level?

Answer:

The competence to determine the inter-connection configuration lies at State level; there is no regional level in Iceland.

5.3. Are there any rules to ensure that prosumers are inter-connected to the distribution network/the grid?

Answer:

There are no specific rules to ensure that prosumers are inter-connected to the distribution network/the grid.

5.4. What are the grid access and grid use principles and rules for the energy generated by each type of residential prosumer?

Answer:

The distribution system operator shall, *inter alia*: Connect customers to the distribution system on request, provided that they fulfil the technical conditions required and provided also that they pay a distribution tariff according to the provisions of a tariff pursuant to Article 12 of the Electricity Act. In exceptional circumstances new customers may be denied access to the distribution system on grounds pertaining to the capacity, security and quality of the system. Such denial of access shall be in writing and reasoned.

5.5. What are the network costs and charges for each type of residential prosumer?

Answer:

The distribution system operator shall establish a tariff for his services pursuant to an income possibility curve decided by the National Energy Authority. The income possibility curve is based on how economically efficient the power plant is, including: i) how effective and stable the electricity provided to the grid is. For example, does the power plant only provide electricity to the grid at certain hours, months, seasons, or does it provide a constant flow of electricity at regular times or even at all times, ii) does the power plant provide electricity to the grid during peak hours.

6. What are the incentives (e.g. through taxes or tariffs) for each type of residential prosumers?

General

National legislation does not set out specific tax incentives for residential prosumers. However, electricity produced for self-consumption is not taxed. The tariff for the electricity that residential prosumers draw from the grid is the same as for other small consumers. Residential prosumers get a discount of the distribution tariff based on how economically efficient their power plant is.

6.1. Does your country apply specific tariffs to prosumers

- to charge them for the electricity they draw from the grid for consumption?
- or to compensate them for the electricity they feed back into the grid?

Answer:

The tariff for the electricity that small-scale electric power plants draw from the grid is the same as for other small consumers. A small-scale electric power plant with a rated capacity of 100 KW or lower is entitled to a discount of at least 50% and up to 100% of the distribution tariff. This only applies if each owner of the small-scale electric plant has at least 33% share in the plant. As for the compensation for the electricity small-scale electric power plants feed back into the grid, the distribution system operator establishes a tariff pursuant to an income possibility curve

decided by the National Energy Authority. The income possibility curve is based on how economically efficient the power plant is, including: i) how effective and stable the electricity provided to the grid is. For example, does the power plant only provide electricity to the grid at certain hours, months, seasons, or does it provide a constant stream of electricity at all times, ii) does the power plant provide electricity to the grid during peak hours.

6.2. Does your country

- tax prosumers in a specific way?
- allocate to them a certain part of the cost to upgrade the grid to accommodate the extra generation they feed into the grid?

Answer:

Prosumers are not taxed in a specific way nor are they allocated certain parts of their costs to upgrade the grid.

7. A. What are the conditions that may encourage residential prosumers (to entry into activity or during functioning)?

General

If the power plant is efficient enough to get a higher discount on the distributing tariff, possibly as high as 100%, there may be an incentive to connect to the grid.

B. What are the conditions that may encourage or act as barriers for residential prosumers (to entry into activity or during functioning)?

General

The lack of a special regulatory framework to support the uptake of residential prosumers, no tax breaks and limited financial incentives may act as barriers. Additionally, prosumers operating power plants that are not economically efficient enough (for the effectiveness of the grid) to get more than 50% discount of the distribution tariff, may not see the added value in connecting the power plant to the grid. In that case the electricity produced is only for domestic use (self-consumption).

7.1. What are the metering systems for each type of residential prosumer? Do these systems provide adequate conditions for prosumers integration in the market?

Answer:

The distribution system operator is responsible for the metering system and it is the same for all types of small-scale electric power plants. As there are no residential prosumers in Iceland, it is unclear whether the system provides adequate conditions for prosumers' integration into the market.

7.2. What are the billing conditions for each type of residential prosumer?

Answer:

The billing conditions are the same for each type of residential prosumers as for other similar producers selling electricity to the grid.

- 7.3. Are there measures to encourage the creation of energy communities at municipal level, or other schemes to encourage inclusive development of the market?

Answer:

There are no measures to encourage the creation of energy communities at municipal level, or other schemes to encourage inclusive development of the market.

- 7.4. Are there rules facilitating the creation of energy cooperatives to provide a legal entity to energy communities? Are there measures facilitating other type of schemes and if so which ones?

Answer:

There are no special rules facilitating the creation of energy cooperatives to provide a legal entity to energy communities or measures facilitating other types of schemes.

- 7.5. What are the procedures/provisions for establishing cooperatives for prosumers? Are they more simple/less costly than those for other schemes?

Answer:

There are no special procedures/provisions for establishing cooperatives for prosumers.

8. Other questions on the regulatory framework

- 8.1. What are the complaint handling procedures for each type of residential prosumer?

There are no specific complaints procedures available to different types of residential prosumers.

The general procedure on complaints is set out in Article 37 of the Electricity Act No. 65/2003. Administrative decisions of the National Energy Authority concerning the granting, revision or the withdrawal of permits pursuant to Article 4, para. 1 (power development), Article 9, para. 2 (power transmission) and Article 11, para. 2 (direct power transmission to one industrial end-user) can be appealed to Appeals Board on the Environment and National Resources (*Úrskurðarnefnd umhverfis- og auðlindamála*)¹⁷. The procedure is set out in the Act on the Appeals Board on the Environment and National Resources No. 130/2011: Appeals are free, should be in writing and signed, submitted within 30 days of the date that the party knew of or should have known of the decision in question. The National Energy Authority has 30 days to respond (additional 15 days in complex cases) and the Board shall decide on the complaint as soon as possible and within 30 days from the receipt of the case files from the National Energy Authority (6 months in complex cases). Decisions that do not fall under the remit of the Appeals Board can be appealed to the Minister of Industries and Innovation. Complaints shall be submitted in writing within 30 days of the date that the party was notified of the decision in question. In other respects, due process shall be subject to the provisions of the Government Administration Act No. 37/1993.

- 8.2. Are there any specific redress procedures available only to residential prosumers?

There are no specific redress procedures available only to residential prosumers.

¹⁷ *Úrskurðarnefnd umhverfis- og auðlindamála*, website: www.uua.is.

Country fiche

The **country fiche** below summarises the information from the report and ranks the **level of favourable impact** of measures in relation to its favourable impact to the take up of residential prosumers.

Country fiche	Ranking Low/Medium/High
General Description of the national regulatory framework - Types of residential prosumers There are currently no prosumers, i.e. residential prosumers, selling energy generated by wind turbines, solar photovoltaic (PV) systems, etc. back to the grid. There are on the other hand several small-scale electric power plants providing electricity to the grid. The RES technology used for small-scale electric power plants in Iceland is hydro. - Institutional framework The National Energy Authority is the competent authority charged with energy related matters, including small-scale electric power plants. The National Energy Authority is a government agency under the auspices of the Ministry of Industries and Innovation. - Applicable legislation, plans and objectives Residential prosumers are not specifically defined in the Electricity Act No. 65/2003, but would currently fall within the definition of small-scale electric power plants. No specific plans or objectives on residential prosumers have been adopted. - Definition of residential prosumers Residential prosumers are not specifically defined in the Electricity Act No. 65/2003, but would currently fall within the definition of small-scale electric power plants.	Low
Specific Questions on the regulatory framework for residential prosumers	
Permitting requirements for each type of residential prosumer Residential prosumers are not specifically defined in the Electricity Act No. 65/2003, but would currently fall within the definition of small-scale electric power plants. For small-scale electric power plants the following applies: A power development license is not required for an electric power plant with a rated capacity under 1 MW, unless the energy produced is sold or transmitted into an electricity supply system. Power development license is not required for an electric power plant with rated capacity below 100 KW.	Medium
Rules applicable to the access to the grid When it comes to small-scale electric power plants the general rule is that the generators are connected “in front of the meter”. Small-scale electric power plants are only allowed to provide electricity to the grid and may not connect	Medium

with other electricity users directly. The distribution system operator shall, <i>inter alia</i> : Connect customers to the distribution system on request, provided that they fulfil the technical conditions required and provided also that they pay a distribution tariff according to the provisions of a tariff pursuant to Article 12 of the Electricity Act. The distribution system operator shall establish a tariff for his services pursuant to an income possibility curve decided by the National Energy Authority.	
Incentives (e.g. taxes and tariffs) for each type of residential prosumers National legislation does not set out specific tax incentives for residential prosumers but electricity produced for self-consumption is not taxed. The tariff for the electricity that residential prosumers draw from the grid is the same as for other small consumers. Residential prosumers get a discount of the distribution tariff based on how economically efficient their power plant is.	Low
Conditions encouraging or acting as barriers for residential prosumers - What are the metering systems for each type of residential prosumer? The distribution system operator is responsible for the metering system and it is the same for different small-scale electric power plants. As there are no residential prosumers in Iceland, it is unclear whether the system provides adequate conditions for prosumers' integration into the market. - What are the billing conditions for each type of residential prosumer? The billing conditions are the same for each type of residential prosumers as for other similar producers selling electricity to the grid. - What are the measures to encourage the creation of energy communities at municipal level? There are no measures to encourage the creation of energy communities at municipal level, or other schemes to encourage inclusive development of the market. - What are the rules facilitating the creation of energy cooperatives? Are they more simple/less costly than those for other schemes? Are cooperatives the most common legal status for energy communities? There are no special rules facilitating the creation of energy cooperatives to provide a legal entity to energy communities or measures facilitating other types of schemes.	Low
Other questions on the regulatory framework - What are the complaint handling procedures for residential prosumer? There are no specific complaints procedures available to different types of residential prosumers. - What are the redress procedures available only to residential prosumers?	Low

There are no specific redress procedures available only to residential prosumers.	
---	--

Executive Summary:

Residential prosumers are **not specifically defined** in the Electricity Act No. 65/2003, but would currently fall within the definition of small-scale electric power plants. No specific plans or objectives on residential prosumers have been adopted. In any case, in practice, Iceland does not count with any residential prosumer.

Regarding **permitting**, for small-scale electric power plants, a power development license is not required the rated capacity is under 1 MW, unless the energy produced is sold or transmitted into an electricity supply system. Concerning **access to the grid**, when it comes to small-scale electric power plants the general rule is that the generators are connected “in front of the meter”. Small-scale electric power plants are only allowed to provide electricity to the grid and may not connect with other electricity users directly. The distribution system operator shall, *inter alia*, connect customers to the distribution system on request, provided that they fulfil the technical conditions required and provided also that they pay a distribution tariff.

National legislation does **not set out specific tax incentives** for residential prosumers but electricity produced for self-consumption is not taxed. The tariff for the electricity that residential prosumers draw from the grid is the same as for other small consumers. Residential prosumers get a discount of the distribution tariff based on how economically efficient their power plant is. The distribution system operator is responsible for the metering system and it is the same for different small-scale electric power plants. There are no measures to encourage the creation of energy communities at municipal level, or other schemes to encourage inclusive development of the market and there are no specific complaints or redress procedures available to residential prosumers.